

In the specification:

Please amend paragraph 17 as follows:

[17] In accordance with the invention a new process, which will be referred to ~~wherein~~ herein as dilutive distillation, uses a miscible solvent of lower boiling point, i.e., higher volatility, to form a binary vapor mixture with the target component to facilitate separation of the target compound from the mixture.

Please amend paragraph 29 as follows:

[29] In the water/ethylene glycol example given, water is added in such a manner that equilibrium (or near equilibrium) can occur with the ~~tower~~ evaporator bottoms. Additionally the dilutive solution is added under pressure higher than that of the ~~tower~~ evaporator and allowed to flash into the ~~tower~~ evaporator. This pressure differential keeps the dilutive solvent in solution until equilibrium can occur. The dilutive water must be allowed to mix thoroughly with the re-circulating bottoms of the evaporator for the process to work under practical conditions. It has been found that simple addition of the dilutive solvent to the evaporator without adequate mixing results in flashing of the dilutive compound without co-distilling the target compound.

Please amend paragraph 34 as follows:

[34] The dilutive distillation system/process presented herein can be in theory modeled with the assumption of equilibrium. Equilibrium is not an absolute requirement and in practice is probably never obtained. However if the dilutive compound is not mixed with the ~~tower~~ evaporator bottoms, then co-distillation of the higher boiling target compound is reduced, and may result in very little distillation of the target compound and simple recycling of the dilutive solvent. By way of example, the addition of the dilutive material directly to the ~~tower~~ evaporator causes flashing of the material and no co-distillation of the target compound. Additionally if the dilutive material is added directly to the ~~tower~~ evaporator pot (~~bottoms~~) at the bottom (bottoms), very rapid, flash boiling occurs and no co-distillation occurs. If the dilutive material is added to the top of the pot (~~bottoms~~) flashing of the dilutive solution occurs and no co-distillation occurs.

So the use of pressure differential to ensure mixing of the dilutive solution with the bottoms results in co-distillation of the target compound.